Availability Study for Hydrogen Value Chains

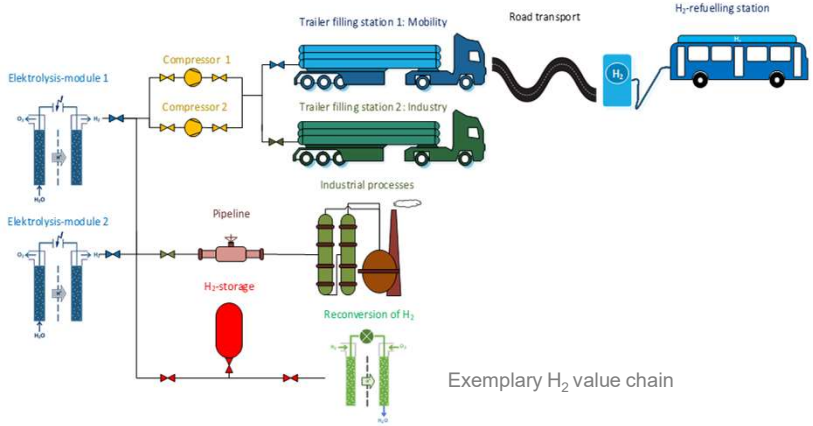
Description

A completely renewable energy system based on a hydrogen backbone requires a high supply reliability for the whole hydrogen value chain. In order to achieve availability rates of nearly 100 % a detailed analysis of required redundancies in the chain and backup scenarios in case of failures has to be conducted. Within this master thesis, a methodology and suitable calculation model will be developed to identify critical components within the chain. The performed analysis will serve as a basis for the elaboration of highly reliable plant and supply chain designs in ongoing and future projects.

Content

- Literature research and requirement analysis (1,5 months)
- Development of methodology and model design (2 months)
- Analysis of various value chains and detection of critical chain links (1,5 months)
- Creation of written master thesis in english or german (1 month)

Start	08/2020
Duration	ca. 6 months
Compensation	€ 2.600
Contact	DI Michael Richter +43 (316) 873-9520, richter@hycenta.at DI Dr. techn. Alexander Trattner +43 (316) 873-9502, trattner@hycenta.at



Exemplary H_2 value chain